



31 July 2012

Hon. Julius Genachowski Chairman Federal Communications Commission 445 12<sup>th</sup> Street, SW Washington DC 20554

Hon. Lawrence Strickling
Assistant Secretary for Communications & Information
Office of the Assistant Secretary
National Telecommunications and Information Administration
U.S. Department of Commerce
1401 Constitution Avenue, N.W.
Washington, DC 20230

Dear Chairman Genachowski and Assistant Secretary Strickling,

On behalf of the Institute of Electrical and Electronics Engineers-United States of America (IEEE-USA), we are writing to urge the FCC and NTIA to work together to clarify further the meaning of "harmful interference" in order to decrease regulatory risk for innovators of wireless technology and increase regulatory certainty for incumbent spectrum users.

Today IEEE-USA is releasing a White Paper on Harmful Interference

[http://www.ieeeusa.org/policy/whitepapers/IEEEUSAWP-HarmfulInterference0712.pdf] which goes into more detail on the issues that should be clarified. We have carefully used the verb "clarify" in both this paper and the attachment, not "define," as we believe it is unrealistic to define explicitly what is harmful interference in view of the large number of special cases that can arise and more that will no doubt come from new technologies and services.

The FCC has identified the key role of harmful interference with respect to technical innovation in the *Notice of Inquiry* in Docket 09-157. NTIA has also made helpful contributions to understanding harmful interference precedents in its 2005 report entitled "INTERFERENCE PROTECTION CRITERIA Phase 1 - Compilation from Existing Sources (<a href="http://www.docstoc.com/docs/100967452/INTERFERENCE-PROTECTION-CRITERIA-Phase-1---Compilation-">http://www.docstoc.com/docs/100967452/INTERFERENCE-PROTECTION-CRITERIA-Phase-1---Compilation-</a>)." But key uncertainties remain as to what is harmful interference, procedures FCC and NTIA use to make harmful interference determinations, and how long it may take to resolve an issue of alleged or possible harmful interference from a proposed new technology or service.

Any reduction in these uncertainties and shortening of the deliberation process can be expected to facilitate technical innovation by reducing regulatory risk for financial investors in wireless innovation. The uncertainty reduction will also benefit private sector incumbents by clarifying to investors what the rights of the licensees are. Note that this applies whether the clarification favors incumbents or favors new entrants as investors just want to understand the risks they face, not have an uneven playing field.

IEEE-USA would be glad to work with FCC and NTIA staff to help identify key issues in this area and policy options. Arriving at the necessary solutions might be facilitated by adopting the precedent established in the International Telecommunication Union (ITU) that developed a number of spectrum sharing solutions using the concept of tolerable interference that helpfully complements the concept of harmful interference. It should be noted that U.S. delegates initiated these ITU proceedings and in most cases provided technical leadership.

IEEE-USA advances the public good and promotes the careers and public policy interests of the more than 200,000 engineering, computing and technology professionals who are U.S. members of IEEE. <a href="http://www.ieeeusa.org">http://www.ieeeusa.org</a>. If we can be of further assistance, please contact Deborah Rudolph in our Washington office at (202) 530-8332 or email at d.rudolph@ieee.org.

Sincerely,

James M. Howard IEEE-USA President

James Mr. Howard

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